Attorney Docket No. 20712-0110
Serial No. 10/822,460

D) AMENDMENTS TO THE DRAWINGS

None.

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E) REMARKS

This Response is filed in response to the Office Action dated May 24, 2005.

Upon entry of this response, claims 1-18 will be pending in this Application, claims 17 and 18 being added in this Response.

In the outstanding Office Action, the Examiner rejected claims 1-16 under 35 U.S.C. § 103(a) as being unpatentable over Parish et al. (U.S. Patent No. 6,462,949).

Rejection under 35 U.S.C. 103

The Examiner rejected claims 1-16 under 35 U.S.C. § 103(a) as being unpatentable over Parish et al. (U.S. Patent No. 6,462,949) hereafter referred to as "Parish."

Specifically, the Examiner stated that

> Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parish et al., (6,462,949). Parish et at., disclose an electronic enclosure cooling system comprising a refrigerant loop (inherent because the condenser the liquid to air heat exchanger 200 is an external condenser unit much like that used in residential air conditioning system; column 2, lines 63-65), the refrigerant circuit driven by a motor (inherent for same previous reason), an air cooled condense arrangement 200 having at least one coil 210 and an evaporator arrangement connected in a first closed refrigerant loop (inherent for the same previous reason); a power amplifiers and other electrical components 110, comprising a cooling system to cool the components, being in fluid communication with the at least one coil 210 of the air cooled condenser arrangement 200. Parish et al., disclose the invention substantially as claimed as state above. See Fig. 1, 2a-2c, and 3a-3b. However, Parish et al., do not disclose a control panel for controlling operation of refrigerant loop. Though Parish et al., do not disclose cooling of specifically an electronic controller, Parish et al., teach the similar cooling of electronic components with a similar cooling circuit. Therefore, the teaching of Parish et al., is obviously meeting the claimed invention.

Applicants respectfully traverse the rejection of claims 1-16 under 35 U.S.C. § 103(a).

The following principle applies to all Section 103 rejections. MPEP 2143.03 provides "To establish prima facie obviousness of a claimed invention, all claim limitations must be taught or suggested by the prior art. In re Royka, 490 F2d 981, 180 USPQ 580 (CCPA 1974). All words in a claim must be considered in judging the patentability of that claim against the prior art. In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970)." [emphasis added] That is, to have any expectation of rejecting the claims over a single reference or a

combination of references, each limitation must be taught somewhere in the applied prior art. If limitations are not found in any of the applied prior art, the rejection cannot stand. In this case, the applied prior art reference clearly does not arguably teach some limitations of the claims.

Parish, as understood, is directed to a cooling apparatus including a low profile extrusion employing a plurality of micro tubes or channels within each low profile extrusion wherein a heat transfer fluid is subsequently pumped through a liquid-to-air heat exchanger. The Parish cooling apparatus includes a closed loop heat transfer system that is solely dedicated to cooling an electronics cabinet.

In contrast, claim 1, as amended, recites a chiller system comprising a refrigerant loop, the refrigerant loop comprising a compressor driven by a motor, an air-cooled condenser arrangement having at least one coil and an evaporator arrangement; a power/control panel for controlling operation of the refrigerant loop, the power/control panel comprising a cooling system to cool components of the power/control panel, the cooling system being in fluid communication with the at least one coil of the air-cooled condenser arrangement.

Claim 16 is directed to a power/control panel for controlling the operation of a chiller system having a refrigerant loop, the refrigerant loop comprising a compressor driven by a motor, an air-cooled condenser arrangement having at least one coil and an evaporator arrangement connected in a first closed refrigerant loop, the power/control panel comprising: a substantially closed enclosure having a plurality of components therein; the enclosure being in fluid communication with the at least one coil of the air-cooled condenser arrangement.

Several of the features recited by Applicants in independent claims 1 and 16 are not taught or suggested by Parish. First, Parish does not teach or suggest a power/control panel comprising a cooling system to cool components of the power/control panel, nor does Parish teach or suggest the cooling system being in fluid communication with the at least one coil of the air-cooled condenser arrangement, as recited by Applicants in independent claim 1. Similarly, Parish does not teach or suggest a power/control panel for controlling the operation of a chiller system having a refrigerant loop, nor does Parish teach or suggest the power/control panel comprising: a substantially closed enclosure having a plurality of components therein, the enclosure being in fluid communication with the at least one coil of the air-cooled condenser arrangement, as recited by Applicants in independent claim 16. The Parish cooling apparatus includes a refrigerant loop heat transfer system that is solely dedicated to cooling an electronics

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cabinet, the components of the electronics cabinet operating totally independently of the refrigeran. loop heat transfer system. Further, even if the electronics cabinet of Parish controlled operation of the refrigerant loop heat transfer system, which it doesn't, the electronics cabinet of Parish does not comprise a cooling system to cool components of the electronics cabinet, the cooling system being in fluid communication with at least one coil of an air-cooled condenser arrangement. Parish teaches a single refrigerant loop heat transfer system dedicated to cooling an electronics cabinet; it does not have both a refrigerant loop and a cooling system as recited in claims 1 and 16. In other words, the refrigerant loop of Parish is also the cooling system. In contrast, the refrigerant loop of the present invention provides cooling to a structure, while the cooling system provides a portion of the cooling of the refrigerant loop to the control panel.

The Examiner states that "an air cooled condense arrangement 200 having at least one coil 210 and an evaporator arrangement connected in a first closed refrigerant loop (inherent for the same previous reason)" is the same as "an air-cooled condenser arrangement having at least one coil and an evaporator arrangement connected in a first closed refrigerant loop" as recited in claim 1. This ground of rejection relies on the doctrine of inherency. MPEP 2112-2113 sets forth the guidelines on inherency. Inherency is not to be taken lightly and not to be asserted unless there is good evidence to suggest that the asserted property or characteristic is necessarily present in the teachings of the prior art reference. The concept of inherency is not provided as a way to fill in the gaps in missing disclosure or teachings based upon speculation, unless the asserted property or characteristic may be shown to be necessarily present by objective evidence. Instead, "inherency" is used when every aspect of the disclosure of a reference and the claimed subject matter are otherwise exactly the same, then it may be inferred that some property or characteristic further recited in the claim must necessarily be present in the art reference. MPEP 2112 provides "The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. In re Rijckaert, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993); In re Oelrich, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.'" In re Robertson, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (citations omitted) "In relying upon the theory of

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inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." Ex parte Levy, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990)."

Contrary to the Examiner's position, the liquid-to-air heat exchanger of Parish is distinctly different from an air-cooled condenser arrangement as claimed. Parish teaches that liquid-to-air heat exchangers, which had not been previously implemented in liquid loop electronic cooling applications, should be used in place of other means of heat exchange, due to the difficulty in achieving comparative cost performance without incurring a great deal of additional expense. Further, alternate approaches using air cooling of the heat transfer fluid would generally not provide efficiency, reliability or cost advantages of the liquid-to-air heat exchanger (*See* col. 6, lines 45-59). Therefore, Parish teaches away from using an air-cooled condenser as claimed in the present invention.

Therefore, for the reasons given above, independent claims 1 and 16 are believed to be distinguishable from Parish and therefore are neither anticipated nor rendered obvious by Parish.

Dependent claims 2-15 and added claim 17 are believed to be allowable as depending from what is believed to be allowable independent claim 1 for the reasons given above. Similarly, added dependent claim 18 is believed to be allowable as depending from what is believed to be allowable independent claim 16 for the reasons given above. In addition, claims 2-15 and 17-18 recite further limitations that distinguish over the applied art. In conclusion, it is respectfully submitted that claims 1-18 are neither anticipated nor rendered obvious by Parish and are therefore allowable.

CONCLUSION

Claims 1-18 are distinguishable over the prior art of record and are in condition for allowance.

Applicants request the entry of the present amendment and the withdrawal of the rejection of claims 1-18. Applicants further request allowance of claims 1-18, and issuance of the application as amended. A timely and favorable action is earnestly solicited.

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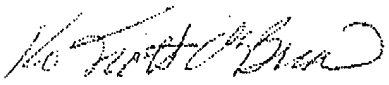
Should the Examiner have any questions with respect to any matter now of record, the Examiner is requested to contact the undersigned at the phone number listed below.

The Commissioner is authorized to charge any fees and credit any overpayments to the Deposit Account 50-1059.

Respectfully submitted,

McNEES, WALLACE & NURICK

By 

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